MCF 3M

Chapter 4 Test Review

Test Wednesday

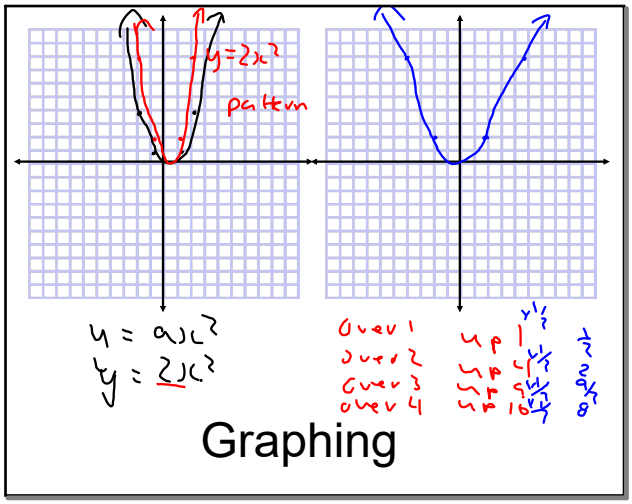
Expansion
Factoring
Identifying the 2 Zeros/Roots
Finding Vertex Form - Completing the Square
Finding Standard Form
Quadratic Formula

WORD PROBLEMS

p 226 1,2,3,4 & 5

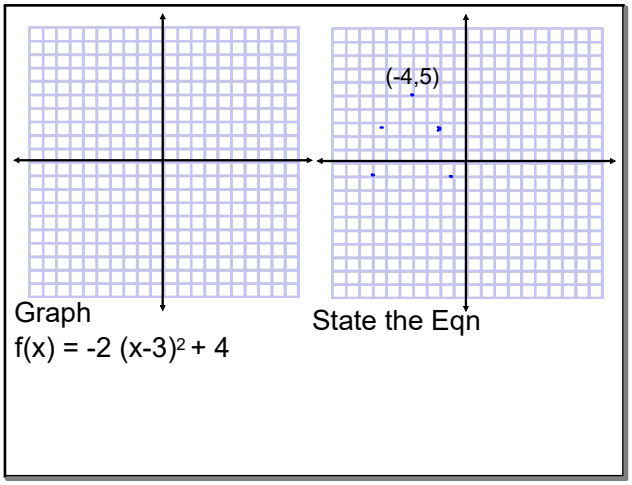
p254-255 q 1-10

Mar 10-8:12 AM



Graphing

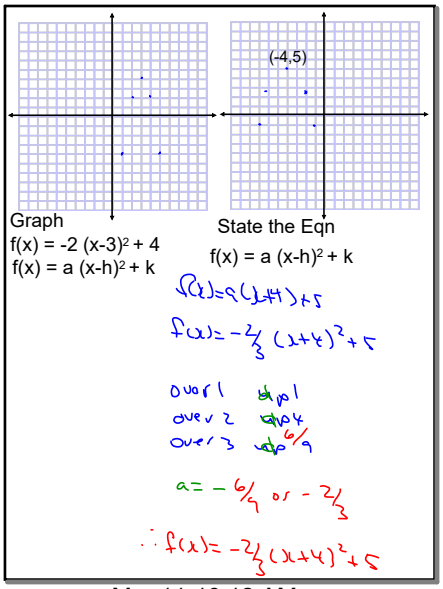
Mar 11-10:12 AM



Graph
f(x) = -2 (x-3)² + 4

State the Eqn

Mar 11-10:12 AM



Mar 11-10:12 AM

Complete The Square

$f(x) = -4x^2 - 8x + 12$

$f(x) = -4(x^2 + 2x) + 12$ partial factor

$f(x) = -4(x^2 + 2x + 1 - 1) + 12$ $(\frac{b}{2})^2$

$f(x) = -4[(x+1)^2 - 1] + 12$

$f(x) = -4(x+1)^2 + 4 + 12$

$f(x) = -4(x+1)^2 + 16$

[-1, 16]

Mar 11-9:43 AM

Factor

$f(x) = x^2 + 2x - 35$

factored zeros

$f(x) = x^2 + 7x - 5x - 35$

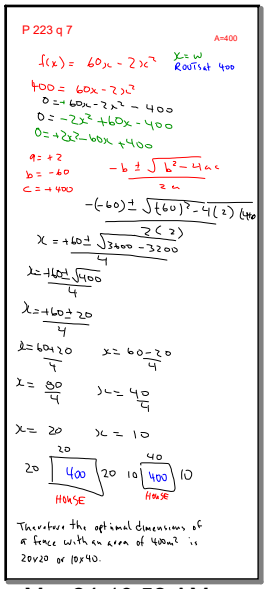
$f(x) = x(x+7) - 5(x+7)$

$= (x+7)(x-5)$

$s = -7$ $t = +5$

A | M
-35 | X
5 + 7

Mar 11-10:07 AM



Mar 24-10:52 AM

State Domain and Range

$f(x) = 2(x+2)^2-7$

$f(x) = -3(x+2)^2-7$

Mar 24-10:57 AM

State Domain and Range

$f(x) = 2(x+2)^2-7$

$D = \{x \in \mathbb{R}\}$

$R = \{f(x) \in \mathbb{R} \mid f(x) \geq -7\}$

(-2, -7)

$f(x) = -3(x+2)^2-7$

Mar 24-10:57 AM

#7

Sally

$h(t) = -5t^2 + 10t$

t = s

h(t) = m

$h(t) = -5(t^2 - 2t)$

$h(t) = -5(t^2 - 2t + 1 - 1)$

$h(t) = -5[(t-1)^2 - 1]$

$h(t) = -5(t-1)^2 + 5$

(1, 5)

Dangerous Ball

5m

The ball reaches a maximum height of 5m at 1 sec. Therefore it is a dangerous ball.

Nov 2-9:39 AM